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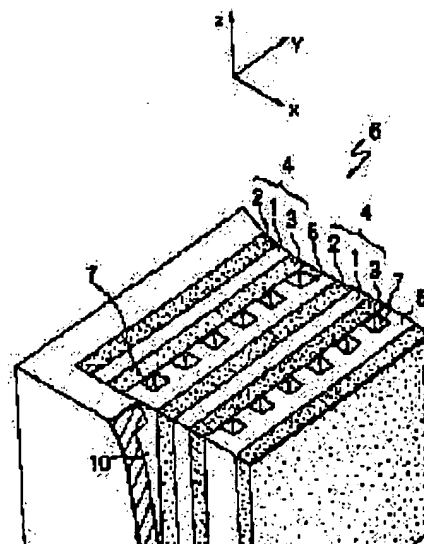
**JP**

## (54) FUEL BATTERY

(57)Abstract:

**PURPOSE:** To simplify a feeding system while simplifying the structure, to maintain high efficiency, and to achieve reduction in the size by feeding liquid fuel perpendicularly to the stream of oxidant gas when the liquid fuel and the oxidant gas are fed to a stack, in which a plurality of electromotive parts having electrolyte plates are piled up.

**CONSTITUTION:** An electromotive part 4 comprises a fuel electrode 2 which is an anode, an oxidant electrode 3 which is a cathode, and an electrolyte plate 1 sandwiched between them. The fuel electrode 2 and the oxidant electrode 3 are formed of conductive porous body so that a gas such as the fuel and the oxidant as well as electrons can be channeled therein. A plurality of the electromotive parts 4 are formed through a separator 5, to form a stack 6, which become a



battery main body. The separator 5 is also formed of conductive material so that it can function as a collecting plate for passing electrons thus generated. In this structure, the oxidant gas is channeled from the lower part to the upper part of the stock 6, and the stream is smoothed by using the heat generated by battery reaction, A plurality of feeding grooves 7 for flowing the gas vertically are provided on the surface of the separator 5 abutting on the oxidant electrode 3.

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